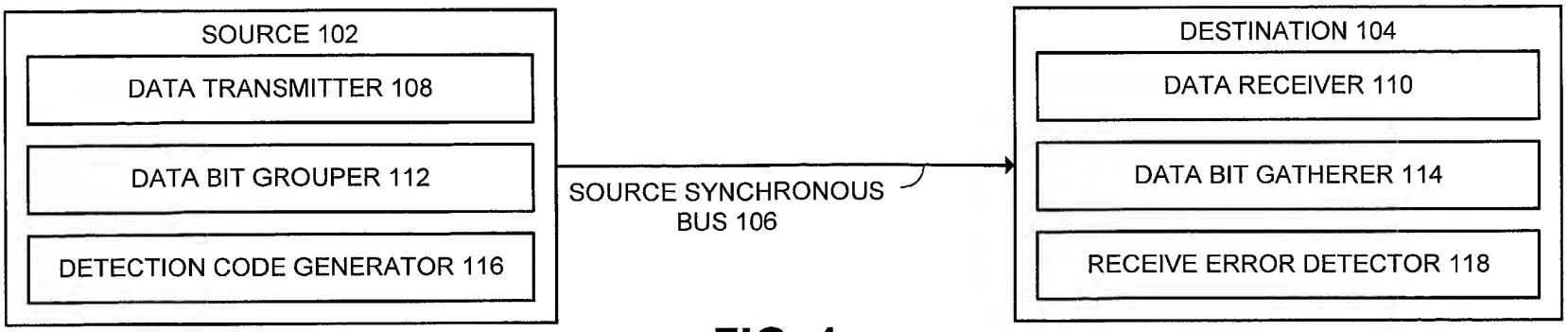
SOURCE 102
DATA TRANSMITTER 108
DATA BIT GROUPER 112
DETECTION CODE GENERATOR 116
SOURCE SYNCHRONOUS BUS 106
DESTINATION 104
DATA RECEIVER 110
DATA BIT GATHERER 114
RECEIVE ERROR DETECTOR 118

FIG. 1

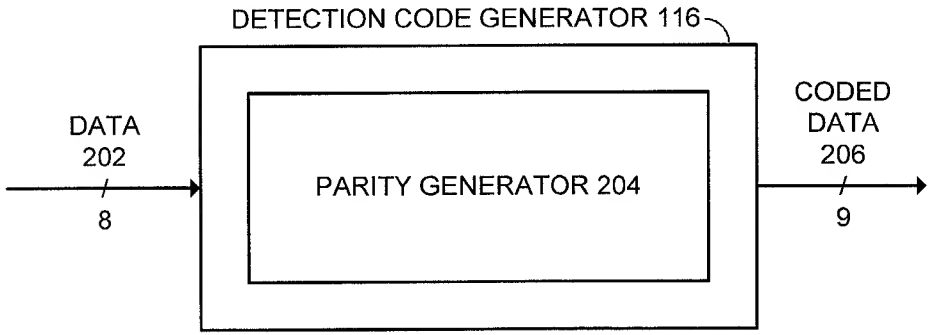
DETECTION CODE GENERATOR 116
DATA 202
8
PARITY GENERATOR 204
CODED DATA 206
9

FIG. 2

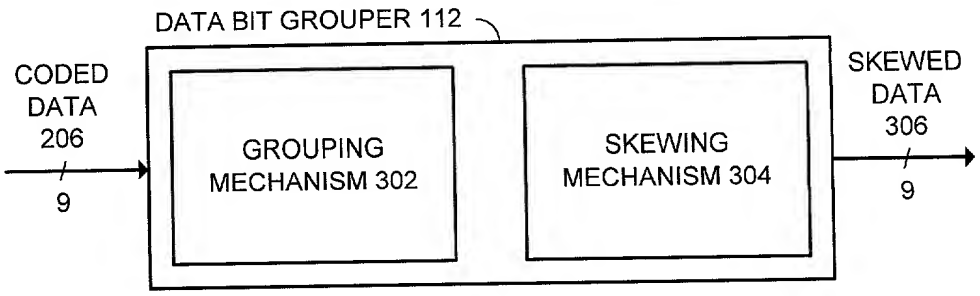

FIG. 3A

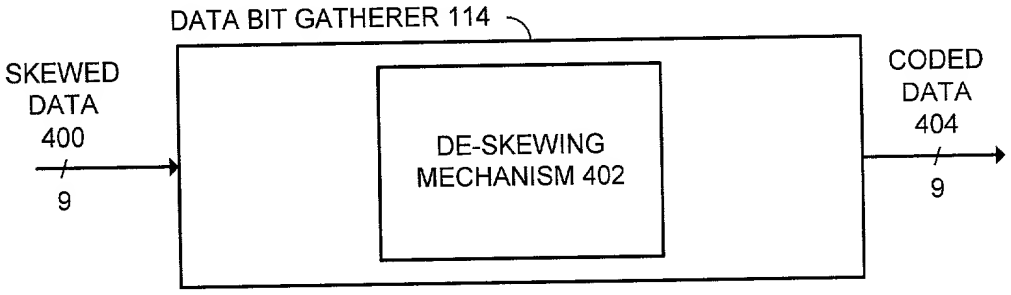

FIG. 4

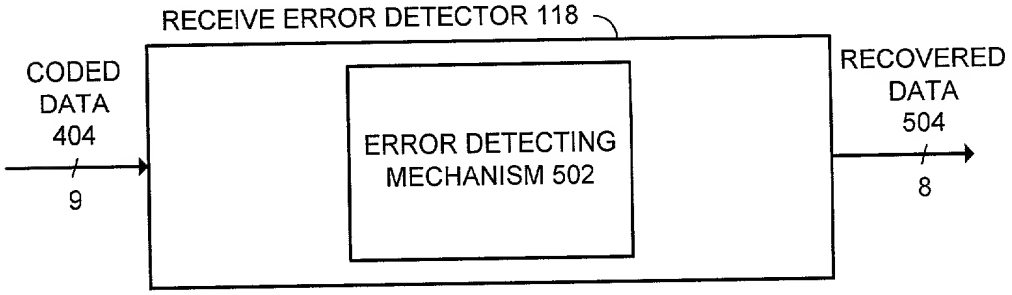

FIG. 5

d_{n0}	...	d_{80}	d_{70}	d_{60}	d_{50}	d_{40}	d_{30}	d_{20}	d_{10}	d_{00}
d_{n1}	...	d_{81}	d_{71}	d_{61}	d_{51}	d_{41}	d_{31}	d_{21}	d_{11}	d_{01}
d_{n2}	...	d_{82}	d_{72}	d_{62}	d_{52}	d_{42}	d_{32}	d_{22}	d_{12}	d_{02}
d_{n3}	...	d_{83}	d_{73}	d_{63}	d_{53}	d_{43}	d_{33}	d_{23}	d_{13}	d_{03}
d_{n4}	...	d_{84}	d_{74}	d_{64}	d_{54}	d_{44}	d_{34}	d_{24}	d_{14}	d_{04}
d_{n5}	...	d_{85}	d_{75}	d_{65}	d_{55}	d_{45}	d_{35}	d_{25}	d_{15}	d_{05}
d_{n6}	...	d_{86}	d_{76}	d_{66}	d_{56}	d_{46}	d_{36}	d_{26}	d_{16}	d_{06}
d_{n7}	...	d_{87}	d_{77}	d_{67}	d_{57}	d_{47}	d_{37}	d_{27}	d_{17}	d_{07}
p_n	...	p_8	p_7	p_6	p_5	p_4	p_3	p_2	p_1	p_0

FIG. 3B

d_{n0}	...	d_{80}	d_{70}	d_{60}	d_{50}	d_{40}	d_{30}	d_{20}	d_{10}	d_{00}						
	d_{n1}	...	d_{81}	d_{71}	d_{61}	d_{51}	d_{41}	d_{31}	d_{21}	d_{11}	d_{01}					
		d_{n2}	...	d_{82}	d_{72}	d_{62}	d_{52}	d_{42}	d_{32}	d_{22}	d_{12}	d_{02}				
			d_{n3}	...	d_{83}	d_{73}	d_{63}	d_{53}	d_{43}	d_{33}	d_{23}	d_{13}	d_{03}			
				d_{n4}	...	d_{84}	d_{74}	d_{64}	d_{54}	d_{44}	d_{34}	d_{24}	d_{14}	d_{04}		
					d_{n5}	...	d_{85}	d_{75}	d_{65}	d_{55}	d_{45}	d_{35}	d_{25}	d_{15}	d_{05}	
						d_{n6}	...	d_{86}	d_{76}	d_{66}	d_{56}	d_{46}	d_{36}	d_{26}	d_{16}	d_{06}
							d_{n7}	...	d_{87}	d_{77}	d_{67}	d_{57}	d_{47}	d_{37}	d_{27}	d_{17}
								p_n	...	p_8	p_7	p_6	p_5	p_4	p_3	p_2

d_{07}	
p_1	p_0

FIG. 3C

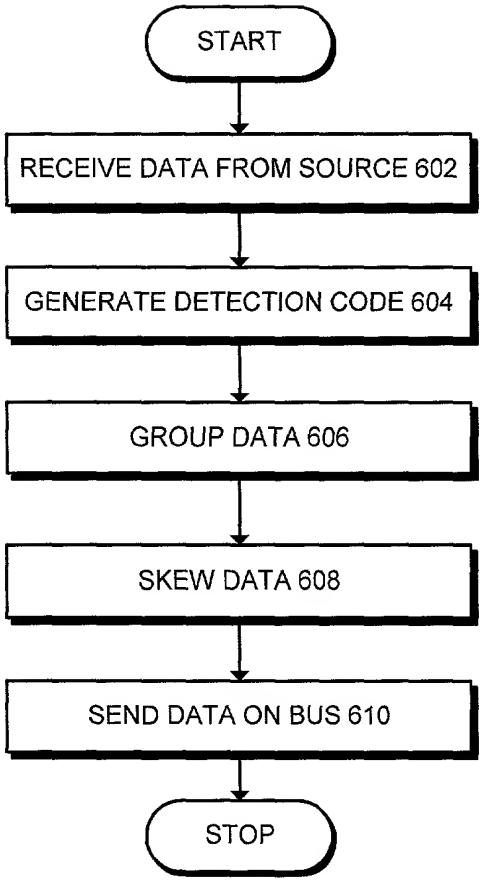
START
RECEIVE DATA FROM SOURCE 602
GENERATE DETECTION CODE 604
GROUP DATA 606
SKEW DATA 608
SEND DATA ON BUS 610
STOP

FIG. 6

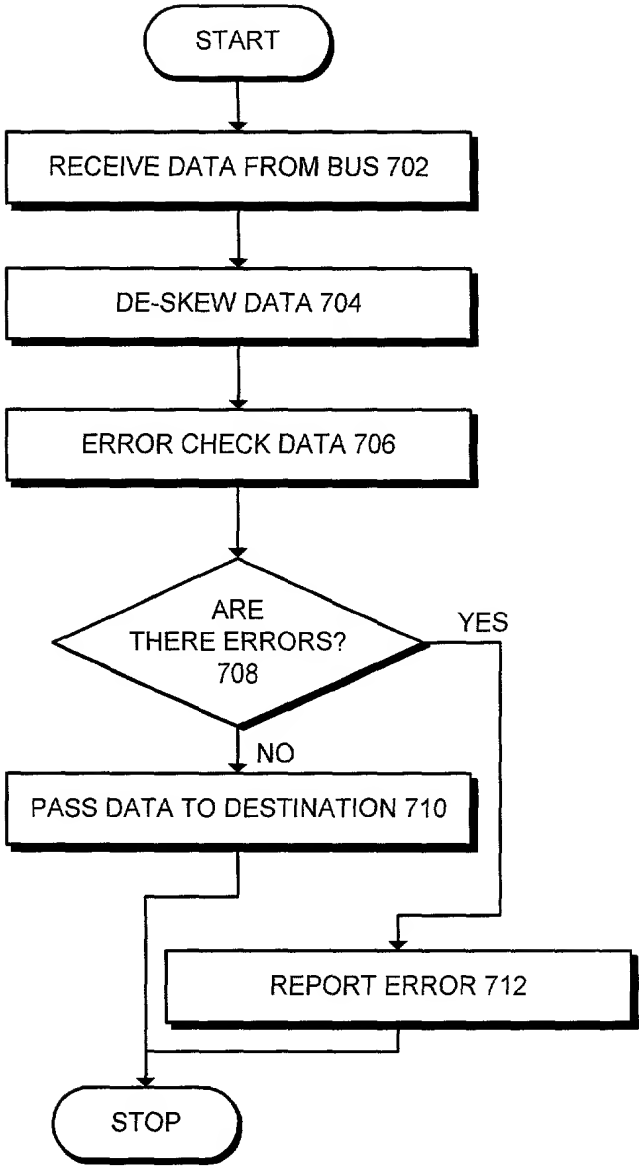
START
RECEIVE DATA FROM BUS 702
DE-SKEW DATA 704
ERROR CHECK DATA 706
ARE THERE ERRORS? 708
YES
NO
PASS DATA TO DESTINATION 710
REPORT ERROR 712
STOP

FIG. 7